



Environmental Investigation & Remediation

SITE HEALTH AND SAFETY PLAN

KOKOMO DUMP SITE

1130 South Dixon Road

Kokomo, Indiana 46901

Site Spill Identification Number: C564

Administrative Settlement Agreement and Order on Consent for

Removal Action Docket Number V-W-13•C-018

Prepared For:

Environmental Protection Agency (U.S. EPA), Region 5

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October 25, 2013

SITE HEALTH AND SAFETY PLAN


Kokomo Dump Site – Kokomo, IN

I hereby certify that the enclosed Site Health and Safety Plan, shown and marked in this submittal, has been prepared in accordance with OSHA 29 CFR 1910 and is proposed to be incorporated with Administrative Settlement Agreement and Order on Consent for Removal Action Docket No. V-W-13•C-018. This Site Health and Safety Plan is submitted for Government review and acceptance.

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GLOSSARY OF ACRONYMS

AHA	Activity Hazard Analysis
ANSI	American National Standards Institute
COC	contaminant of concern
CFR	Code of Federal Regulations
CIH	Certified Industrial Hygienist
CPR	Cardiopulmonary Resuscitation
CRZ	Contamination Reduction Zone
CSP	Certified Safety Professional
dBA	decibel A-weighted
DEET	N, N-diethyl-m-toluamide
EMR	experience modification rate
EMT	emergency medical technician
ERRS	Emergency and Rapid Response Services
USEPA	United States Environmental Protection Agency
EZ	Exclusion Zone
HASP	Site Health and Safety Plan
HAZWOPER	Hazardous Waste Operation and Emergency Response
HIPO	high loss potential
HMIS	Hazardous Materials Identification System
HTRW	hazardous, toxic and radioactive waste
IDLH	immediately dangerous to life and health
kV	Kilovolt
MCL	Maximum Contaminant Level
µg/kg	micrograms per kilogram
mg/kg	milligrams per kilogram
mg/m³	milligrams per cubic meter
MSDS	Material Safety Data Sheet
NFPA	National Fire Prevention Association
NIOSH	National Institute of Occupational, Safety and Health
NPL	National Priority List
O&M	Operations and Maintenance
OSHA	Occupational Safety and Health Administration
PM	Project Manager
POL	petroleum, oils, and lubricants
PPE	personal protective equipment
ppm	parts per million
RIR	recordable incident rate
SCBA	self-contained breathing apparatus
SOP	Standard Operating Procedure
SOW	Scope of Work
SHSO	Site Health and Safety Officer
WNV	West Nile Virus

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1.0 INTRODUCTION AND SITE ENTRY REQUIREMENTS

This document describes the health and safety guidelines developed for the Kokomo Dump Site, to protect on-site personnel, visitors, and the public from physical harm and exposure to hazardous materials or wastes. The procedures and guidelines contained herein were based upon the best available information at the time of the plan's preparation. Specific requirements will be revised when new information is received or conditions change. A written amendment will document all changes made to the plan. Any amendments to this plan will be included in Attachment A. Where appropriate, specific OSHA standards or other guidance will be cited and applied.

All work practices and procedures implemented on site must be designated to minimize worker contact with hazardous materials and to reduce the possibility of physical injury. All work will be performed in accordance with applicable Federal 29 CFR 1910 and 1926 health and safety regulations, including the Federal 29 CFR 1910.120 Hazardous Waste Operations and Emergency Response regulation.

1.1 *Daily Safety Meetings*

Daily safety meetings will be held at the start of each shift to ensure that all personnel understand site conditions and operating procedures, to ensure that personal protective equipment is being used correctly and to address worker health and safety concerns.

1.2 *Site Specific Training and Acknowledgement*

The Response Manager shall be responsible for informing all individuals assigned to this project of the contents of this plan and ensuring that each person signs the Site Specific Training Record in Attachment E. By signing the Site Specific Training Record, individuals acknowledge receipt of this training and that they recognize the potential hazards present on-site and the policies and procedures required minimizing exposure or adverse effects of these hazards.

1.3 *Key Personnel*

Project/Task Order: Site	
Key Personnel	
Names and Titles	Contact Information
Shelley Lam – USEPA Region 5, OSC	Office – 317-308-3073; cell – 317-417-0980
Heidi Meyer - Response Manager	Office – 317-347-9590 ext 22; cell 317-696-3734
Nick Michailides - SHSO	Office – 708-333-9915; cell – 219-286-5359
Brad Adams - Project Coordinator/Manager	Office – 317-347-9590 ext 31; cell – 317-847-9973
Subcontractors	
Company	Scope of Services
Environmental Restoration LLC (ER)	Health and Safety; removal/restoration actions
Midway Services	Drilling
American Industrial Services (AIS)	Waste Disposal

Accutek Radar Imaging	Utility Locating
Miller Surveying	Professional Surveyors
Morgan Clark Associates	Phase I Environmental Site Assessment
Prism GeoImaging	Geophysical Survey

2.0 ROLES AND RESPONSIBILITIES

2.1 *Response Manager (RM): Heidi Meyer*

The Response Manager, as the field representative for SESCO and its subcontractors, has the responsibility for implementing the Site Health and Safety Plan (HASP). The RM shall manage the project and ensure all health and safety requirements are met. The RM will work in conjunction with the Site Health and Safety Officer for this project.

2.2 *Site Health and Safety Officer (SHSO): Nick Michailides*

The Site Health and Safety Officer (ER representative) is assigned to the site on a full-time basis with functional responsibility for implementing the HASP.

Specific Duties Include:

- a. Assist RM in providing a safe and healthful work environment.
- b. Supervise confined space entries.
- c. Assist RM in reporting and investigating all incidents.
- d. Ensure proper decontamination of personnel and equipment is accomplished.
- e. Ensure that air monitoring equipment is calibrated and operational.
- f. Conduct personal air monitoring as required.
- g. Perform respirator fit tests, as necessary.
- h. Inventory and inspect personal protective equipment (PPE) prior to personnel entries into exclusion zone.
- i. Prepare summary letter of personal air sampling results.
- j. Ensure proper personal protective equipment is being utilized.
- k. Assist RM in obtaining required personnel training and medical records.
- l. Inspect first aid kits and fire extinguishers.

2.3 *Other:*

Any persons who observe a health and safety hazard should immediately report observations/concerns to appropriate key personnel listed in Section 2.1 or 2.2 above.

2.4 *U.S. EPA On-Scene Coordinator (OSC): Shelley Lam*

The OSC has overall project authority and directs the project manager regarding the tasks required to meet project objectives. The OSC has the authority to stop work and initiate corrective actions should there be a reason to do so.

3.0 SITE BACKGROUND AND SCOPE OF WORK

3.1 *Site Background*

Kokomo Dump Site was owned and operated by the City of Kokomo as a former municipal waste open dump in the 1960s, but had been shut down in January 1970, when a landfill opened nearby. It was reported that an estimated 30,000 cubic yards of accumulated garbage were present in early 1970 when the dump ceased operations. The newspaper articles indicated that the dump site was seven (7) acres in size. It is presumed that a portion of the property to the south of the Site was part of the dump site. Further investigation and removal activities may be necessary on the adjacent southern property based on results of investigation activities. The Site has been utilized as a yard waste composting facility since around 1980 and is open seasonally from April through November. Residents of the Kokomo area can bring compostable yard waste to the facility for disposal and the waste is processed through chippers and is turned into mulch and re-usable landscaping products. The Indiana Department of Environmental Management (IDEM) discovered drums exposed in what was described as a creek bed / bank at the Site in April of 2011. IDEM collected samples of the leaking drum contents resulting in high concentrations of metals. IDEM requested the assistance of the US EPA. A US EPA OSC, in conjunction with a US EPA START contractor, conducted a Site assessment on August 19, 2011. High concentrations of arsenic and lead were confirmed in both surface and subsurface samples of soils. In addition PCBs were detected above US EPA regulatory limits in subsurface soils.

The US EPA subsequently issued a General Notice of Public Liability to the City of Kokomo on April 5 2012.

3.2 *Scope of Work (SOW)*

SESCO has been tasked by the EPA to perform the following:

- Develop and implement Site plans including a Site-specific Health and Safety Plan (HASP), a Quality Assurance Project Plan (QAPP), a Site Emergency Contingency Plan, and a Work Plan;
- Establish Site security;
- Determine the extent of buried drums and contamination in soil;
- Develop and implement a plan to control, contain, and/or remove drums and highly contaminated soil;
- Perform sampling and analysis to determine disposal options; and,
- Consolidate and package hazardous substances, pollutants, and contaminants for transportation and off-Site disposal in accordance with the U.S. EPA Off-Site Rule, 40 Code of Federal Regulations (CFR) §300.440.

The above tasks will be completed in a phased approach. Due to the nature of the Site, the extent of contamination will be determined in a series of steps and not during one (1) mobilization to the Site. It is expected that Site work and the Summary Report will be completed in a span of five (5) to six (6) months following Work Plan approval. The tasks listed below will be completed during this phase of the project:

- Develop and implement Site plans including a Site-specific HASP, a QAPP, a Site Emergency Contingency Plan, and a Work Plan;
- Site boundary survey;
- Phase I Environmental Site Assessment (ESA);
- Removal of brush and yard waste from Site;
- Geophysical survey;
- Surface and sub-surface soil sampling (soil borings);
- Test pits based on results of geophysical survey; and,
- Development of a Summary Report detailing the work performed.

Below is a list of action items that will be completed to fulfill the above tasks. These action items represent the greatest potential for health and safety related risks and thus are the focus of this HASP:

- Prepare a secure staging area for drums and excavated potentially contaminated soils/materials
- Remove and overpack drums and stage on pallets with appropriate access paths.
- Properly characterize the contents of the drums
- Bulk/segregate similar waste streams
- Excavate contaminated soils and treat on site or load out contaminated soils for disposal.
- Backfill excavations
- Transport and dispose of all hazardous materials at an EPA approved disposal facility, in accordance with U.S. EPA's Off-Site Rule
- Follow Applicable or Relevant and Appropriate Requirements (ARARs) issued for this site by IDEM.

4.0 HAZARD ASSESSMENT

This section is to be addressed in the daily tool box safety meeting as each task is to be initiated. Each Activity Hazard Analysis (AHA) is designed to develop awareness of chemical and physical hazards specific to each task. It would be impractical to repeat in complete detail each control measure and Standard Operating Procedure (SOP) for each job task. Sources, hazards and control measures will be addressed for each job task.

Specific work tasks with unique hazards and/or PPE requirements must be evaluated or reevaluated prior to beginning work. This task review will be led by the Project Health and Safety Manager and the SHSO, and will include knowledgeable individuals such as the worker(s) and the supervisor. PPE requirements, based on this assessment, will be included in Section 6 of the HASP or in the AHA for the specific task. All workers must be trained in the requirements of the HASP and the applicable AHAs prior to beginning work. The required PPE may be changed by the SHSO, based on the results of additional air monitoring, or on task-specific needs. Downgrades will require the approval of the Project Health and Safety Manager unless otherwise permissible by the HASP.

The following section outlines the AHAs, Referenced SOPs and Chemical Hazards associated with this project. Applicable SOPs are available from SESCO or ER's Health and Safety Database.

The AHAs should be revised for site-specific activities and reviewed with the work crew before commencing any activity.

The following table lists SESCO and ER health and safety SOPs that are applicable to this project.

Referenced SOPs:	
SESCO SOPs applicable to this project:	
HASP-01 Public Utility Locating HASP-02 Private Utility Locating HASP-03 Tailgate Safety Meeting	
ER SOPs applicable to this project or task order:	
HS-01 Air Monitoring and Sampling HS-02 Blood Borne Pathogens Exposure Control Plan HS-04 Flammable Liquids Transfer (Bonding and Grounding) HS-05 Cold Stress HS-08 Decontamination Measures HS-10 Motor Vehicle Operations HS-11 Drum Handling HS-12 Electrical Safety - General HS-15 Hazard Communication HS-16 Hearing Conservation HS-17 Heat Stress Safety HS-13 Excavation and Trenching	HS-18 Heavy Equipment Operation HS-24 Personal Protective Equipment HS-26 Respiratory Protection Program HS-28 Pressure Washing HS-35 Hazard Categorization and Inventory HS-36 Proper Lifting Techniques HS-38 Fire Prevention Protection HS-49 Tool Safety and Inspection HS-50 First Aid HS-51 Incident Reporting and Investigation HS-52 General Waste Management HS-53 Spill Prevention Response
UXO known or suspected to present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	UXO support and plans provided Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Lifts Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Items to be lifted: Drums (via all terrain forklift or applicable heavy equipment)	Critical <input type="checkbox"/> Ordinary <input type="checkbox"/>
Excavations Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	

4.1 Chemical Hazards

Site Contaminants/Chemicals of Concern					
Chemical	Media	PEL	ACTION LEVEL	Route of Entry	Symptoms Acute/Chronic
PCB (54% Chlorine)	Liquid or solid (soil)	0.5 mg/m3 {skin}	0.25 mg/m3	Inhalation Ingestion Contact Absorption	Irritation eyes, liver damage, reproductive effects, chloracne
VOC (Benzene)	Vapor or liquid (soil)	1 ppm PEL 5 ppm STEL	0.5 ppm	Inhalation Ingestion Absorption	Irritation eyes, skin, resp system; dizziness; HA; staggered gait. CHRONIC (leukemia)
Lead	Solid/Dust	0.05 ^{mg} / _{m3}	0.025 mg/m3	Inhalation Ingestion Contact	Lassitude, insomnia; facial pallor; anorexia, low-wgt, malnutrition; constipation , abdominal pain, colic; anemia; tremor; kidney disease
Mercury	Liquid/Vapor	C 0.1 mg/m3 {skin}	0.05 mg/m3	Inhalation Absorption Ingestion Contact	Irrit eyes, skin; cough, chest pain, dysp, bron, pneu; tremor, insom, indecision, head, lass, GI dist
Barium Compounds (except Barium	Solid / Dust	0.5 mg/m3	0.25 mg/m3	Inhalation Ingestion	Irrit eyes, skin, upper resp; gastroenteritis; musc spasm; hypokalemia

Sulfate)					
Barium Sulfate (found in paint pigments)	Solid / Dust	15 mg/m3 TOTAL 5 mg/m3 RESP	7.5 mg/m3 TOTAL 2.5 mg/m3 RESP	Inhalation Ingestion Contact	Irrit eyes, nose, upper resp; baritosis
Cadmium dust	Solid	.005 mg/m3	.0025 mg/m3 Resp	Inhalation Ingestion	Pulm edema, dysp, cough, chest tight, head; chills, musc aches; nau, vomit, diarr
Chromium(III)	Liquid or solid (drum)	0.5 mg/m3	0.25 mg/m3	Inhalation Ingestion Contact	Irrit eyes, sens derm
Silver	Solid / Dust	0.01 mg/m3	0.005 mg/m3	Inhalation Ingestion Contact	Blue-grey eyes, nasal septum, throat, skin; irrit, ulceration skin
Selenium	Solid / Dust	0.2 mg/m3	0.1 mg/m3	Inhalation Ingestion Contact	Irrit eyes, skin, nose, throat; chills, fever; metallic tase / garlic breath; GI dist; derm; eye, skin burns.
Arsenic (inorganic)	Solid/Dust	0.010 mg/m3	.005 mg/m3	Inhalation Absorption Ingestion Contact	Ulceration of nasal septum, Derm, GI disturbances, resp irrit, carc

The above listing should not be taken as a complete assessment of the hazards posed by materials at the Kokomo Dump Site. The known and unknown mixed chemical hazards at this site prevent a clear determination of the specific effects of discrete compounds. Therefore, personnel must be alert for symptoms of possible exposure such as unusual smells, stinging, burning eyes, nose and throat, skin irritation, as well as feeling extremely well, depressed, sleepy or tired. Symptoms must be immediately reported to the site supervisor. For additional information on potential COCs see the NIOSH Pocket Guide to Chemical Hazards September 2005 edition or www.cdc.gov/niosh.

4.2 Task Specific Hazards and Controls

This section is to be addressed in the daily tool box safety meeting as each task is to be attempted. Each AHA is designed to develop awareness to chemical and physical hazards specific to each task. It would be impractical to repeat in complete detail each control measure and SOP for each job task. Sources, Hazards and Control Measures will be addressed for each job task.

Activity Hazard Analysis		
JOB TASK: MOBILIZATION and SITE SETUP		
PERSONAL PROTECTIVE EQUIPMENT: LEVEL D / MOD D		
Hazard	Sources	Control Measures

Activity Hazard Analysis		
JOB TASK: MOBILIZATION and SITE SETUP		
PERSONAL PROTECTIVE EQUIPMENT: LEVEL D / MOD D		
Hazard	Sources	Control Measures
Corrosive/toxic liquids/sludge/solids	Open drums, containers, dirt	<ul style="list-style-type: none"> - Do not move or handle open containers - Do not move or excavate any soil or brush piles
Traffic related injury	Driving motor vehicles	<ul style="list-style-type: none"> - Follow HS-10 Motor Vehicle Operation - Adjust controls/mirrors prior to operation - Utilized defensive driving techniques.
Struck by/caught between	Vehicle & Equipment Operation	<ul style="list-style-type: none"> - Follow HS-18 Heavy Equipment Operation - Ensure outriggers are properly positioned for wheeled excavator/equipment - Only qualified drivers permitted to operate vehicles - Wear ANSI Type 2 high-visibility safety vest - Wear seat belts while in operation - Back up alarms functional and loud enough to hear over surroundings - Ground personnel are not allowed within swing radius of equipment while in operation - Personnel must establish eye contact with operator and operator must disengage and remove hands from controls prior to entering the swing radius
Ergonomics	Lifting and bending	<ul style="list-style-type: none"> - Follow HS-36 Proper lifting techniques - Use Buddy system - No individual lifting over 40 lbs. - Use mechanical means when feasible
Heat Stress / Cold Stress	Work in protective garments	<ul style="list-style-type: none"> - Cool / Warm break areas - Follow ER SOP HS-17 - Plenty of Fluids & breaks
Noise	Heavy equipment/Hand tools	<ul style="list-style-type: none"> - Hearing protection required at all times when working with tools generating sound above 85db - Hearing protection required when operation open-cab equipment - If you have to shout to be heard, use hearing protection
Fire	Electrical devices/service	<ul style="list-style-type: none"> - Fire extinguishers with at least a 3A:40B:C rating shall be placed in when working
Electrocution	Power tools/equipment	<ul style="list-style-type: none"> - Inspect all power cords prior to use - Use GFCI on all connections - De-energize all circuits in building except for overhead lights and limited 110v receptacles. - Protect/elevate temporary power cords
Cuts/Punctures	Sharp Objects – Sheet Metal/ Nails/screws	<ul style="list-style-type: none"> - Beware of sharp objects - Wear cut resistant gloves - Use safety utility knife - Always cut away from body
Slip/Trip/Fall	Poor condition of building Insufficient lighting Uneven terrain/debris	<ul style="list-style-type: none"> - Keep area organized - Identify/mark hazards - Remove debris from walking/ working surfaces

Activity Hazard Analysis		
JOB TASK: EXCAVATION AND SAMPLING / MIXING (IF NEEDED) OF CONTAMINATED SOILS / BRUSH		
PERSONAL PROTECTIVE EQUIPMENT: LEVEL C		
Hazard	Sources	Control Measures
Toxic Chemicals	Soil / Dusts	Maintain dust suppression with water spray/mist as needed. Control work area to authorized personnel only Utilize PPE per Section 6 of this HASP Minimize contact with contaminated soils
Cuts/Punctures	Sharp Objects	Beware of sharp objects Wear leather gloves
Ergonomics	Lifting and Bending	Proper lifting techniques Buddy system
Cold Stress	Winter Temperatures	Follow H&S Procedures (ACGIH Guidelines) Plenty of Fluids & breaks in warm areas
Noise	Equipment/vehicles Hand tools	Hearing protection for levels > 85 dBs;
Slips/Trips/Falls	Uneven Terrain Debris	Identify/mark hazards Remove debris from walking / working surfaces Maintain soil stockpiles a safe distance from edge of excavation
Electrocution/explosion/fire	Overhead/underground utilities	Locate and mark existing energized lines – Local locate company Disconnect/de-energize electrical lines if possible Use spotter at all time during operations near overhead lines Boot lines or use hot stick to move line out of reach of equipment
Struck by/caught between	Vehicle & Equipment Operation/Traffic	Only qualified drivers permitted to operate vehicles Wear ANSI Type 2 high-visibility safety vest Wear seat belts while in operation Stay away from operating equipment, Avoid walking between equipment and stationary objects,

Activity Hazard Analysis		
JOB TASK: LOADING OF CONTAMINATED SOILS		
PERSONAL PROTECTIVE EQUIPMENT: LEVEL C		
Hazard	Sources	Control Measures
Toxic Chemicals	Soil	Maintain dust suppression with water spray/mist as needed. Control work area to authorized personnel only Utilize PPE per Section 6 of this HASP Minimize contact with contaminated soils
Cuts/Punctures	Sharp Objects	Beware of sharp objects Wear leather gloves
Ergonomics	Lifting and Bending	Proper lifting techniques Buddy system
Cold Stress	Winter Temperatures	Follow H&S Procedures (ACGIH Guidelines) Plenty of Fluids & breaks in warm areas
Noise	Equipment/vehicles Hand tools	Hearing protection for levels > 85 dBs;
Slips/Trips/Falls	Uneven Terrain Debris	Identify/mark hazards Remove debris from walking / working surfaces
Struck by/caught between	Vehicle & Equipment Operation/Traffic	Only qualified drivers permitted to operate vehicles Use spotters when backing or moving dump trucks onsite Wear ANSI Type 2 high-visibility safety vest Wear seat belts while in operation Stay away from operating equipment, Avoid walking between equipment and stationary objects,

Activity Hazard Analysis		
JOB TASK: BACKFILLING OF EXCAVATIONS		
PERSONAL PROTECTIVE EQUIPMENT: LEVEL D		
Hazard	Sources	Control Measures
Cuts/Punctures	Sharp Objects	Beware of sharp objects Wear leather gloves
Ergonomics	Lifting and Bending	Proper lifting techniques Buddy system
Cold Stress	Winter Temperatures	Follow H&S Procedures (ACGIH Guidelines) Plenty of Fluids & breaks in warm areas
Noise	Equipment/vehicles Hand tools	Hearing protection for levels > 85 dBs;
Slips/Trips/Falls	Uneven Terrain Debris	Identify/mark hazards Remove debris from walking / working surfaces
Struck by/caught between	Vehicle & Equipment Operation/Traffic	Only qualified drivers permitted to operate vehicles Use spotters when backing or moving dump trucks onsite Wear ANSI Type 2 high-visibility safety vest Wear seat belts while in operation Stay away from operating equipment, Avoid walking between equipment and stationary objects,

Activity Hazard Analysis		
JOB TASK: SURFACE AND SUBSURFACE SAMPLING OF CONTAMINATED SOILS		
PERSONAL PROTECTIVE EQUIPMENT: LEVEL D / MOD D/UPGRADE TO LEVEL C OR B BASED ON AIR MONITORING RESULTS		
Hazard	Sources	Control Measures
Toxic Chemicals	Soil	Control work area to authorized personnel only Utilize PPE per Section 6 of this HASP Minimize contact with contaminated soils
Cuts/Punctures	Sharp Objects	Beware of sharp objects Wear leather gloves
Ergonomics	Lifting and Bending	Proper lifting techniques Buddy system
Cold Stress	Winter Temperatures	Follow H&S Procedures (ACGIH Guidelines) Plenty of Fluids & breaks in warm areas
Noise	Equipment/vehicles Hand tools	Hearing protection for levels > 85 dBs;
Slips/Trips/Falls	Uneven Terrain Debris	Identify/mark hazards Remove debris from walking / working surfaces Maintain soil stockpiles a safe distance from edge of excavation
Electrocution/explosion/fire	Overhead/underground utilities	Locate and mark existing energized lines – Local locate company Disconnect/de-energize electrical lines if possible Use spotter at all time during operations near overhead lines Boot lines or use hot stick to move line out of reach of equipment
Struck by/caught between	Vehicle & Equipment Operation/Traffic	Only qualified drivers permitted to operate vehicles Wear ANSI Type 2 high-visibility safety vest Wear seat belts while in operation Stay away from operating equipment, Avoid walking between equipment and stationary objects,

Activity Hazard Analysis		
JOB TASK: CONDUCT WORK ZONE / PEM AIR MONITORING		
PERSONAL PROTECTIVE EQUIPMENT: Consistent with Task		
HAZARD	SOURCES	CONTROL MEASURES
Corrosive/toxic liquids/sludge	Dust, loose solids, liquids	Poly –coated Tyvek or equiv., nitrile gloves, supplied air respirator, use wetting dust suppression agents as necessary. Level B not anticipated.
Noise	Equipment	Hearing protection at levels > 85 dBS.
Struck by / Pinch Points	Bobcat, Forklift, Vehicles	Stay away from operating equipment, avoid walking between equipment and stationary objects, use hand signals
Slips / Trips / Falls	Uneven terrain / Debris	Keep work area organized
Heat Stress / Cold Stress	Winter Temperatures PPE Usage	Follow HS-17 Follow H&S Procedures (ACGIH Guidelines)

Activity Hazard Analysis		
Job TASK: CHEMICAL CONTAINER SAMPLING / HANDLING / BULKING		
PERSONAL PROTECTIVE EQUIPMENT: LEVEL B (Sampling Unknown)/LEVEL C(Handling/Bulking Known)		
Hazard	Sources	Control Measures
Chemical Exposure	Chemicals in drums, totes, buckets, and small containers Chemicals in vats, tanks	<ul style="list-style-type: none"> - Avoid contact - Prior to retrieval secure containers to prevent leakage or splash hazard - Use appropriate sampling techniques with drum thieves - Use proper field categorization techniques - Use proper bulking techniques based on sound field categorization results - Bulk only like materials based on field categorization - Splash prevention measures/ face shields- visqueen shield around drums - If possible have thermometer near for temperature changes - After drum is full leave container open for a period of time - Implement proper handling in accordance with HS-11 Drum Handling - Control work area to authorized personnel only - Utilize proper PPE per section 6.0 of this HASP - Perform air monitoring per section 8.0 of this HASP - Implement proper decontamination procedures per section 10.0 - Construct proper containment around storage area
Fire	Site chemical (Oxidizers, flammable liquids/solids) Electrical devices/service	<ul style="list-style-type: none"> - Minimize handling of containers - Properly segregate chemicals to prevent reaction - Store out of direct sunlight - Perform air monitoring per section 6.0 of this HASP - Fire extinguishers with at least a 3A:40B:C rating in when working
Ergonomics	Lifting and bending	<ul style="list-style-type: none"> - Buddy system/Proper lifting techniques - No individual lifting over 40 lbs.
Struck by/caught between	Vehicle & Equipment Operation/Traffic	<ul style="list-style-type: none"> - Follow HS-10 Motor Vehicle Operation - Follow HS-18 Heavy Equipment Operation - Ensure outriggers are properly positioned for wheeled excavator/equipment - Only qualified drivers permitted to operate vehicles - Wear ANSI Type 2 high-visibility safety vest - Wear seat belts while in operation - Back up alarms functional and loud enough to hear over surroundings - Ground personnel are not allowed within swing radius of equipment while in operation - Personnel must establish eye contact with operator and operator must disengage and remove hands from controls prior to entering the swing radius
Heat/Cold Stress	Seasonal Temperatures/ Work in protective garments	<ul style="list-style-type: none"> - Cool/Warm break areas - Follow ER SOP HS-17 - Follow ER SOP HS-5

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Activity Hazard Analysis		
Job TASK: CHEMICAL CONTAINER SAMPLING / HANDLING / BULKING		
PERSONAL PROTECTIVE EQUIPMENT: LEVEL B (Sampling Unknown)/LEVEL C (Handling/Bulking Known)		
Hazard	Sources	Control Measures
		<ul style="list-style-type: none"> - Plenty of Fluids & breaks - Follow H&S Procedures (ACGIH Guidelines)
Noise	Heavy Equipment, Diaphragm Pumps, Air compressor, Hand Tools	<ul style="list-style-type: none"> - Hearing protection required at all times when working near pumps, air compressors, hand tools and heavy equipment above 85db
Electrocution	Power tools/equipment	<ul style="list-style-type: none"> - Inspect all power cords prior to use - Use GFCI on all connections
Cuts/Punctures	Sharp Objects – Sheet Metal/ Nails/screws	<ul style="list-style-type: none"> - Beware of sharp objects - Wear cut resistant gloves - Use safety utility knife - Always cut away from body
Slip/Trip/Fall	Structure/roof trusses Uneven terrain/debris	<ul style="list-style-type: none"> - Keep area organized - Identify/mark hazards - Remove debris from walking/ working surfaces

Activity Hazard Analysis		
JOB TASK: DECONTAMINATION OPERATIONS		
PERSONAL PROTECTIVE EQUIPMENT: LEVEL C / MOD D BASED ON AIR MONITORING RESULTS		
Hazard	Sources	Control Measures
Chemical Exposure	Chemicals in drums, totes, buckets, or small containers	<ul style="list-style-type: none"> - Avoid contact - Prior to retrieval secure containers to prevent leakage or splash hazard - Use appropriate sampling techniques with drum thieves - Use proper field categorization techniques - Use proper bulking techniques based on sound field categorization results - Bulk only like materials based on field categorization - Splash prevention measures/ face shields- visqueen shield around drums - If possible have thermometer near for temperature changes - After drum is full leave container open for a period of time - Implement proper handling in accordance with HS-11 Drum Handling - Control work area to authorized personnel only - Utilize proper PPE per section 6.0 of this HASP - Perform air monitoring per section 8.0 of this HASP - Implement proper decontamination procedures per section 10.0 - Construct proper containment around storage area
Burns/lacerations	Hot water pressure washer	<ul style="list-style-type: none"> - Operate pressure washer per manufactures instructions - Pressure washer must be equipped with safety shut-off - Inspect hose prior to each use - Do not point wand at other individuals - Wand must be at least 48" in length - Wear splash shield and safety glasses when not wearing respirator - Never use for personnel decontamination
Confined Space	Excavations / trenches	<ul style="list-style-type: none"> - Avoid entry if possible - Follow HS-06 Confined Space Entry
Fire	Site chemical (Oxidizers, flammable liquids/solids) Electrical devices/service	<ul style="list-style-type: none"> - Minimize handling of containers - Properly segregate chemicals to prevent reaction - Store out of direct sunlight - Perform air monitoring per section 6.0 of this HASP - Fire extinguishers with at least a 3A:40B:C rating in when working
Ergonomics	Lifting and bending	<ul style="list-style-type: none"> - Buddy system/Proper lifting techniques - No individual lifting over 40 lbs.

Activity Hazard Analysis		
JOB TASK: DECONTAMINATION OPERATIONS		
PERSONAL PROTECTIVE EQUIPMENT: LEVEL C / MOD D BASED ON AIR MONITORING RESULTS		
Hazard	Sources	Control Measures
Struck by/caught between	Vehicle & Equipment Operation/Traffic	<ul style="list-style-type: none"> - Follow HS-10 Motor Vehicle Operation - Follow HS-18 Heavy Equipment Operation - Ensure outriggers are properly positioned for wheeled excavator/equipment - Only qualified drivers permitted to operate vehicles - Wear ANSI Type 2 high-visibility safety vest - Wear seat belts while in operation - Back up alarms functional and loud enough to hear over surroundings - Ground personnel are not allowed within swing radius of equipment while in operation - Personnel must establish eye contact with operator and operator must disengage and remove hands from controls prior to entering the swing radius
Heat/Cold Stress	Seasonal Temperatures/ Work in protective garments	<ul style="list-style-type: none"> - Cool/Warm break areas - Follow ER SOP HS-17 - Follow ER SOP HS-5 - Plenty of Fluids & breaks
Noise	Heavy Equipment, Diaphragm Pumps, Air compressor, Hand Tools	<ul style="list-style-type: none"> - Hearing protection required at all times when working near pumps, air compressors, hand tools and heavy equipment above 85db
Electrocution	Power tools/equipment	<ul style="list-style-type: none"> - Inspect all power cords prior to use - Use GFCI on all connections
Cuts/Punctures	Sharp Objects – Sheet Metal/ Nails/screws	<ul style="list-style-type: none"> - Beware of sharp objects - Wear cut resistant gloves - Use safety utility knife - Always cut away from body
Slip/Trip/Fall	Structure/roof trusses Uneven terrain/debris	<ul style="list-style-type: none"> - Keep area organized - Identify/mark hazards - Remove debris from walking/ working surfaces

4.3 Physical Hazards

Physical/Environmental Hazard Analysis		
Hazard	Pre Planning to Control Hazard	Active Control Measures
Electrical	<ol style="list-style-type: none"> 1. Locate and mark existing energized lines. 2. De-energize lines if necessary to perform work safely. 3. All electrical circuits will be grounded. 4. All 120 volt single phase which are not a part of the permanent wiring will have a ground-fault interrupter in place. 5. Temporary wiring will be guarded, buried or isolated by elevation to prevent accidental contact by personnel or equipment. 6. Evaluate potential for high moisture/standing water areas and define special electrical wiring needs-typically requirement for low voltage lighting systems. 	<ol style="list-style-type: none"> 1. Utilize Qualified Electrical Contractor for any new or temporary electrical construction. 2. Ensure electrical equipment/material meet all local, state and federal code and specifications 3. Use GFCI for all power tool usage. 4. All electrical cords must be inspected for damage prior to each use
Ergonomic	<ol style="list-style-type: none"> 1. All operations evaluated for ergonomic impact. 2. Procedures written to define limits of lifting, pulling, etc. 3. Procedures to define how personnel will utilize proper ergonomic concepts and utilize mechanical material handling equipment. 4. Necessary mechanical material handling equipment specified and ordered for project. 	<ol style="list-style-type: none"> 1. Proper body mechanics techniques stressed and enforced on a daily basis. 2. Mechanical handling equipment maintained and utilized. 3. Proper body mechanics stressed in scheduled safety meetings. 4. Injuries reported and medically treated if in doubt about severity. 5. Operations changed as necessary based on injury experience or potential. 6. Manual Lifting/Handling Heavy Objects Buddy system

Physical/Environmental Hazard Analysis		
Hazard	Pre Planning to Control Hazard	Active Control Measures
Existing Site Topography	<ol style="list-style-type: none"> 1. Survey site prior to layout. Identify areas unsafe for personnel or equipment due to physical conditions. 2. Identify/locate existing utilities. 3. Determine impact of site operations on surrounding properties, communities, etc. 4. Identify mechanized equipment routes both on site and onto and off the site. 5. Layout site into exclusion and contamination reduction zones based on initial site evaluation. 	<ol style="list-style-type: none"> 1. Awareness to work environment - regular inspection/audits to identify changing conditions. 2. Shut down operations when unknown conditions encountered.
Fires & Explosions	<ol style="list-style-type: none"> 1. Evaluate all operations for fire and explosion potential. 2. Define specific procedures for unique operations presenting unusual hazard such as flammable tank demolition. 3. Ensure that properly trained personnel and specialized equipment is available. 4. Define requirements for handling and storage of flammable liquids on site, need for hot work permits and procedures to follow in the event of fire or explosion. 5. Define the type and quantity of fire suppression equipment needed on site. 6. Coordinate with local fire fighting agencies to discuss unique fire hazards, hazardous materials, etc. 7. Ensure site operations comply with 29CFR 1910.157(g). 	<ol style="list-style-type: none"> 1. Inspect fire suppression equipment on a regular basis. 2. Store flammables away from oxidizers and corrosives. 3. Utilize Hot Work Permit for all hot work on-site. 4. Follow any site specific procedures regarding work around flammables. 5. Review and practice contingency plans. 6. Discuss on regular basis at scheduled safety meetings.
Flammable Vapor and Gases	<ol style="list-style-type: none"> 1. Evaluate site to determine sources of likely flammable gas or vapor generation. 2. Develop specific procedures to be followed in the event of exposure to flammables. 3. Specify specialized equipment needs for inerting flammable atmospheres, ventilating spaces and monitoring flammable vapor concentrations. 4. Define requirements for intrinsically safe equipment. 5. Develop contingency plan to follow in the event of fire or explosion. 	<ol style="list-style-type: none"> 1. Calibrated monitoring equipment available and utilized by trained personnel whenever working where flammable gas or vapor is present. 2. Monitoring performed at regular frequency and in all areas where vapor could generate or pool. 3. Equipment and operations shut down when threshold levels are exceeded. 4. Contingency plans reviewed regularly by all involved personnel. 5. Work areas are carefully inspected to look for possible ignition sources. Sources are removed. 6. Operations shut down if specific task procedures can't be followed to the letter. 7. Fire Extinguishers
Heavy Equipment Operation	<ol style="list-style-type: none"> 1. Define equipment routes and traffic patterns for site. 2. Insure that operators are properly trained on equipment operation for all equipment required on project. 3. Define safety equipment requirements, including back up alarm and roll over, for all equipment on site. 4. Define equipment routes and traffic patterns for site. 5. Implement SOP of requiring operators to safety inspect equipment on a daily basis in accordance with manufacturer requirements. 6. Evaluate project requirements to ensure that equipment of adequate capacity is specified. 	<ol style="list-style-type: none"> 1. Equipment inspected as required. 2. Equipment repaired or taken out of service. 3. Ground spotters are assigned to work with equipment operators. 4. Utilize standard hand signals and communication protocols. 5. Personnel wear the proper PPE; utilize hearing protection, gloves for handling rigging, etc. 6. Equipment safety procedures discussed at daily scheduled safety meetings. 7. Personnel do not exceed lifting capacities, load limits, etc. for equipment in question. 8. Personnel follow basic SOP's which prohibit passengers on equipment, activating brakes and grounding buckets, securing loads prior to movement, etc. 9. Heavy Equipment Operations ER SOP
Illumination	<ol style="list-style-type: none"> 1. Evaluate all operations and work areas to determine lighting requirements. 2. Specify specialized lighting requirements including explosion proof, intrinsically safe, lighting needs. 3. Determine if nighttime outdoor operations are necessary. 	<ol style="list-style-type: none"> 1. Inspect specialized equipment and discard or replace as needed. 2. Add additional lighting to areas with lighting deficiencies. 3. Inspect drop cords and portable lights on

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Physical/Environmental Hazard Analysis		
Hazard	Pre Planning to Control Hazard	Active Control Measures
	<ol style="list-style-type: none"> Evaluate tasks to be performed and number of light plants necessary to allow operations. Ascertain if outdoor lighting from nighttime operations will have an impact on surrounding communities. 	<ol style="list-style-type: none"> regular basis. Replace or repair as necessary. Illumination
Noise	<ol style="list-style-type: none"> Local community noise standards examined. Expected loud operations evaluated to determine compliance with community standards. Loud operations scheduled for approved time periods. Noise level standards established for equipment brought onto site. Hearing protection requirements defined for personnel expected to have excessive exposures. 	<ol style="list-style-type: none"> Personnel receive annual audiogram. Personnel required to wear hearing protection. Routine noise level monitoring and dosimetry performed. Defective equipment repaired as needed. Ongoing hearing conservation education promoted at scheduled safety meetings. Medical evaluation following noise (impact) exposure if symptoms present themselves. Sec. 7.0 – Weston ECH&S Program Manual Occupational Noise & HC Program
Personal Injuries	<ol style="list-style-type: none"> Site operations will be evaluated for exposures with serious injury potential such as falling objects, pinch points, flying objects, falls from elevated surfaces, etc. A written Fall Prevention Program will be developed if workers will be required to work at heights greater than 6 feet from unguarded work locations. PPE requirements will be based on potential for injury. 	<ol style="list-style-type: none"> Personnel will wear required PPE. Specialized equipment such as rope grabs, winches, etc. will be inspected prior to each use. Defective equipment will be immediately replaced. All injury and near miss incidents will be reported to the SHSO. First aid/CPR trained person on site at all times. First aid on site. Transport for medical care if necessary. Bloodborne Pathogens Exposure Control Plan for First Aid Providers
Small Equipment Usage	<ol style="list-style-type: none"> Site operations will be evaluated to determine need for specialized intrinsically safe, explosion-proof and UL approved equipment and instruments. Implement requirement for G.F.I., double insulated tool usage, or assured grounding program in all outdoor operations, will be utilized. Specify equipment needs to ensure that equipment used only for the purpose for which it is designed and to prevent abuse or misuse of the equipment. Specify requirements for the inspections and maintenance of specialized equipment. Specify that all equipment utilized on the project meets all OSHA requirements. 	<ol style="list-style-type: none"> Inspect each tool prior to each use. Ensure all guards are in use and properly positioned. Ensure item being worked on is properly braced if necessary. Get help when appropriate to hold or brace item being worked on. Wear leather or other appropriate gloves in addition to level C PPE. FLD-38 Hand & Power Tool Usage
Weather Conditions	<ol style="list-style-type: none"> Evaluate prevailing weather conditions for the site. Contingency plans developed for likely severe weather conditions such as tornado, and extreme thunderstorm. Provide for daily weather forecast service in extreme weather areas. Plan to weatherize safety systems, such as showers and eye washes that would be impacted by extreme cold weather. Order necessary specialized cold weather clothing. Grounding and bonding requirements defined for thunderstorm areas. Sheltered air conditioned break areas provided for extreme hot and cold weather zones. 	<ol style="list-style-type: none"> Employees trained in contingency plan for severe weather conditions. Emergency water sources inspected regularly in cold areas. Weather service contacted regularly during storm conditions. Supervisory personnel cease operations during extreme storm conditions (i.e., thunderstorms). Personnel evacuate to safe assembly area. Incident Weather Lighting strikes within 5 miles of site require 30 minute suspension from every strike thereafter.
Heat Stress	<ol style="list-style-type: none"> Anticipate possible high temperatures (summer months). Be aware of heat stress symptoms, quit sweating, pale, clammy skin, dizziness 	<ol style="list-style-type: none"> Cool break area. Drink water. Buddy system/ awareness First aid on site. Medical care if symptoms persist. Heat Stress Prevention/Monitoring

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Physical/Environmental Hazard Analysis		
Hazard	Pre Planning to Control Hazard	Active Control Measures
Cold Stress	<ol style="list-style-type: none"> 1. Anticipate possible low temperatures (winter months). 2. Remember the temperature does not have to be below freezing to have a cold stress situation. 	<ol style="list-style-type: none"> 1. Warm break area. 2. Warm decaffeinated drinks. 3. Buddy system/ awareness. 4. First aid on site. 5. Medical care if symptoms persist 6. Cold Stress

Please see HS-35 for physical hazards regarding waste bulking if necessary.

5.0 TRAINING REQUIREMENTS

This section describes ER's project training requirements and site visitor policy. Training of all personnel shall be in accordance with OSHA 29 CFR 1910.120 and the National Fire Protection Association (NFPA) standards.

5.1 Project Training Requirements

The training listed in Table 5-1 will be provided to project participants as noted. All required training will be documented and this documentation maintained onsite.

Project Training Requirements:		
Topic	Description	Personnel
General Training		
Site Safety and Health Plan	Site-specific hazards and control requirements, before commencement of field work. Includes training in proper use and care of PPE.	All project personnel
Activity Hazard Analysis	Activity-specific hazards, controls and training requirements for a specific phase or activity, prior to commencement of activity	Workers, supervisors and oversight personnel engaged in the activity
Daily Safety Briefing	In addition to plan-of-the-day and daily hazard reminders, often used to cover a specific topic; provided refresher training on various issues; or changes in hazards, controls or procedures.	All field workers, supervisors and field oversight personnel
Emergency Action Plan	Roles, responsibilities, recognition of emergency conditions, reporting and notification, evacuation and other procedures.	All project personnel, with detailed information on procedures for workers with special responsibilities
OSHA 40-Hour Hazardous Waste Operation (HAZWOPER) Training	General hazards and controls for hazardous waste activities at remediation sites, prior to performing work in an exclusion zone.	General site workers, supervisors, oversight personnel on HAZWOPER sites
OSHA 8-Hour Supervisor	Managing HAZWOPER work activities	Supervisors and management support staff on HAZWOPER sites
OSHA 8-Hour Refresher	Current annual refresher for HAZWOPER sites.	Workers, supervisors and oversight personnel engaged in the activity
Hazard Communication	Requirements for MSDS, labels; hazards of site materials and controls; location of and access to inventories and MSDS.	All project personnel potentially exposed to hazardous materials
Fire Extinguisher	General education on selection, distribution, and proper use of fire extinguishers.	All project personnel

Project Training Requirements:		
Topic	Description	Personnel
<i>Special Training</i>		
First aid/ Cardiopulmonary Resuscitation (CPR)	Red Cross, National Safety Council or other authorized course, with current refresher	At least 2 project personnel
Fall Protection	Fall (from elevation) hazards, fall protection techniques, especially proper use of personal fall arrest systems and rescue procedures.	Task-specific, workers exposed to fall hazards.
Lockout/Tagout	Site-specific energy control and verification procedures.	Authorized personnel working on de-energized systems, and affected employees whose work may be impacted by a lockout/tagout situation.
Other Heavy Equipment operations	Qualified by Construction Manager, Superintendent or Equipment Supervisor as documented on ER Equipment Operator Qualifications Form	Equipment Operators
Power tools (e.g. chain saws, chippers, powder-actuated tools, compressed air systems)	Hazards and proper use and maintenance as described in operations manual. Power-operated tool users certified by manufacturer.	Tool users

5.2 Visitor Indoctrination Policy

All site visitors will be required to review the daily tailgate safety issues and sign the visitor log. At a minimum, all visitors must be informed of the anticipated hazards and PPE requirements, designated work zones, escort procedures, and emergency procedures.

6.0 PERSONAL PROTECTIVE EQUIPMENT

The following is a brief description of the personal protective equipment, which may be required during various phases of the project. The U.S. EPA terminology for protective equipment will be used; Levels A, B, C and D.

Respiratory protective equipment shall be NIOSH-approved and use shall conform to OSHA 29 CFR Part 1910.134 Requirements. Each employer shall maintain a written respirator program detailing selection, use, cleaning, maintenance and storage of respiratory protective equipment. The written Respirator Program will be maintained at the local and regional offices.

6.1 Level A Protection Shall Be Used When: (NOT ANTICIPATED)

- The extremely hazardous substance requires the highest level of protection for skin, eyes and the respiratory system;
- Substances with a high degree of hazard to the skin are known or suspected;
- Chemical concentrations are known to be above Immediately Dangerous to Life and Health (IDLH) levels; or,
- Biological hazards requiring Level A are known or suspected.

6.2 Level B Protection Shall Be Used When:

- The substance(s) has been identified and requires a high level of respiratory protection but less skin protection;
- Concentrations of chemicals in the air are IDLH or above the maximum use limit of an APR with full-face mask;
- Oxygen deficient or potentially oxygen deficient atmospheres (<19.5%) are possible; and/or, Confined space entry may require Level B.
- Incomplete identification of gases and vapors, but not suspected to be harmful to skin or skin absorbable

Level B Protective Equipment at a Minimum Shall Consist of:

SCBA / Cascade System	Full Face
Chemical Resistant/Protective Coveralls (type)	Saranex / Acid Suits*
Inner Gloves (type)	Nitrile
Outer Chemical Gloves (type)	Nitrile
Outer Work Gloves (type)	Leather**
Safety Shoes/Boots (type)	Chemical resistant steel toed
Hard Hat	ANSI approved
Modifications:	* Acid suits will be used during liquid transfer activities.
	** Cut resistant gloves will be used when handling metal and other sharp objects.

6.3 Level C Protection Shall Be Used When:

- The same level of skin protection as Level B, but a lower level of respiratory protection is required;
- The types of air contaminants have been identified, concentrations measured, and an air-purifying respirator is available that can remove contaminants; or,
- The substance has adequate warning properties and all criteria for the use of APR respirators has been met

Level C Protective Equipment at a Minimum Shall Consist of:

Air Purifying Respirator	Full face
Cartridges	OV/P100
Chemical Resistant/Protective Coveralls	Saranex / Acid suits*
Inner Gloves	Nitrile
Outer Chemical Gloves	Nitrile
Outer Work Gloves	Leather**
Safety Shoes/Boots	Chemical protective boot covers
Hard Hat	ANSI approved
Reflective Safety Vests	ANSI Type 2 high-visibility
Modifications:	* Acid suits during liquid transfer and sludge handling.
	** Cut resistant gloves will be used when handling metal and other sharp objects.

6.4 Modified Level D Protection Shall Be Used When:

- The atmosphere is demonstrated to be within OSHA permissible limits
- Work functions preclude splashes, immersion or the potential for unexpected inhalation of, or contact with, hazardous concentrations of harmful chemicals.

Mod Level D Protection Equipment at a Minimum Shall Consist of:

Chemical Resistant/Protective Coveralls	Breathable SMS or equivalent
Safety Shoes/Boots	Steel toed/shank
Boot Covers (booties)	Latex
Work Gloves	Cotton or Leather**
Hard Hat	ANSI approved
Face Shield***	As necessary
Reflective Safety Vests	ANSI Type 2 high-visibility
Safety Glasses	NIOSH approved
Modifications:	** Cut resistant gloves will be used when
*** face screen ear muffs and cut proof chaps	handling metal and other sharp objects.
During chainsaw operation	

6.5 Level D Protection Shall Be Used When:

- The atmosphere is demonstrated to be below OSHA permissible exposure limits
- Work functions preclude splashes, immersion or the potential for unexpected inhalation of, or contact with, hazardous concentrations of harmful chemicals.

Level D Protection Equipment at a Minimum Shall Consist of:

Standard Work Clothing	Long pants/sleeved shirt
Safety Shoes/Boots	Safety Toed/shank
Boot Covers (booties)	As Needed
Work Gloves	Leather or cut resistant
Hard Hat	ANSI approved
Face Shield	As Needed
Safety Glasses	ANSI approved
Reflective Safety Vest	ANSI Type 2 high-visibility
Modifications:	** Cut resistant gloves will be used when
	handling metal and other sharp objects.

6.6 Decisions to Upgrade/Downgrade PPE

All decisions to downgrade from Level B to C or D must be accompanied by air monitoring results. The Site Safety officers and ER H&S Managers must be advised of on-site decisions to downgrade. All decisions must be documented with an Addendum to the Plan.

The following conditions will necessitate reevaluation of PPE use.

- commencement of a new work not previously identified
- change of job tasks during a work phase
- change of season/weather
- contaminants other than those identified in Safety Plan
- change in ambient levels of contaminants (Real time and PEM)
- change in work which affects degree of chemical contact

6.7 Project Personal Protective Equipment Requirements

Project Personal Protective Equipment Requirements:**						
Activity	Respiratory Protection	Body Protection	Hand Protection	Eye/Face Protection	Foot Protection	Hearing Protection
Site Mobilization/staging & Backfilling (Level D)	None	None	Leather work gloves	ANSI-approved safety glasses	ANSI-approved safety boots	Plugs or muffs when >85 dBA
Waste / Drum Sampling / Handling / Equipment Decon (Level C)	Full-face Air-purifying respirator with OV/P100 /AG cartridges	Tyvek or equivalent	Nitrile inner/outer gloves	Full-face Respirator	Chemical resistant boots	Plugs or muffs when >85 dBA
Excavation/mixing Loading soil (Level C)	Full-face Air-purifying respirator with OV/P100 /AG cartridges	Tyvek or equivalent	Nitrile inner/outer gloves	Full-face Respirator	Chemical resistant boots	Plugs or muffs when >85 dBA
Surface and Subsurface Soil Sampling (Level D)	None	Long Sleeved Shirt	Leather or Nitrile gloves as based on activity	ANSI-approved safety glasses	ANSI-approved safety boots	Plugs or muffs when >85 dBA
Work Zone Air Monitoring	Consistent with Task/ Activity	Consistent with Task/ Activity	Consistent with Task / Activity	Consistent with Task/ Activity	Consistent with Task/ Activity	Consistent with Task / Activity
Demobilization (Level D)	None	None	Leather work gloves	ANSI-approved safety glasses	ANSI-approved safety boots	Plugs or muffs when >85dBA

**** Level B PPE will be utilized for ALL Hazard Classification of UNKNOWN drums , if discovered on the Site. PPE upgrade during surface/subsurface soil sampling based on air monitoring results.**

Personal Protective Equipment Inspection and Care:

Inspection and care of PPE are covered in the ER Corporate SOP HS-24.

6.8 Respiratory Protection Program

SESCO shall implement the SESCO Respiratory Protection Program for its employees and subcontractors and train them on its contents. The program will be administered by the SHSO.

Respiratory protective equipment shall be NIOSH-approved and use shall conform to OSHA 29 CFR Part 1910.134 Requirements. SESCO and subcontractors shall maintain a written respirator program detailing selection, use, cleaning, maintenance and storage of respiratory protective equipment.

7.0 MEDICAL MONITORING REQUIREMENTS

7.1 *Pre-Employment Medical Examination*

- a. Pre-employment medical examinations are required for persons working at hazardous waste sites.
- b. All examinations must be completed and documented prior to assignment to this site.
- c. All examinations will be conducted following parameters established by WorkCare™.

7.2 *Site Specific Medical Examination*

- a. BLL / ZPP for site activities with potential exposure to lead >30 days in calendar year.
- b. Cadmium BL
- c. Arsenic Urine

7.3 *Annual Medical Examination*

The medical examination must have been within a 6-month period prior to on-site activity and repeated annually.

7.4 *Suspected Exposure Medical Examination*

- a. Following any suspected uncontrolled exposure to site contaminants, personnel should be scheduled for a special medical examination.
- b. The medical examination will be specific for the contaminants and the associated target organs or physiological system.
- c. Questions regarding the type of medical examination can be directed to ER's Vice President, Health and Safety.

7.5 *Contractor Medical Examination Requirements*

All subcontractors entering the contamination reduction or exclusion zone will have adequate medical surveillance satisfying 29 CFR 1910.120.10 (f).

8.0 *Health and Hazard Monitoring*

According to 29 CFR 1910.120 (h) Air Monitoring shall be used to identify and quantify airborne levels of hazardous substances and health hazards in order to determine the appropriate level of employee protection needed on-site.

8.1 Routine Air Monitoring Requirements

- Upon initial entry to rule out IDLH conditions;
- When the possibility of an IDLH condition or flammable atmosphere has developed;
- When work begins on a different portion of the site;
- Contaminants other than those previously identified are being handled;
- A different type of operation is initiated;
- Employees are handling leaking drums or containers or working in areas with obvious liquid contamination; and,
- During confined space work.

Air monitoring will consist at a minimum of the criteria listed below. All air monitoring data will be documented and available in the command post site files for review by all interested persons. Air monitoring instruments will be calibrated and maintained in accordance with the manufacturer's specifications. Calibration and maintenance performed will be entered in the site log and/or instrument log book.

8.2 Site Specific Air Monitoring Requirements

Monitoring:					
Real Time (Air, noise, heat, radiation, light)					
Activity	Target Analyte	Instrument	Frequency	Action Levels	Actions/Upgrade and Rationale
1. Site Setup	Flammable atmosphere	Combustible Gas Indicator (MultiRAE Plus) (AreaRAE)	Initial and periodic	> 10% LEL Evacuate area/space	Evacuate area Ventilate
2. Soil Excavation			Continuous during CSE		
3. Soil Sampling / Loading	VOCs	Photo – ionization Detector (PID) (MultiRAE Plus) (AreaRAE)	Initial transfer and periodic	Background – < 25 ppm	Level D
4. Drum Handling / Sampling			Continuous during CSE	25 ppm - 50 ppm Level C	Air-purifying respirator
5. Backfill				50 ppm - <250ppm Level C or Level B based on constituent PEL	Supplied-air respiratory protection
6. Decontamination				>250 ppm	Evacuate area, until conditions subside
	Oxygen	O ₂ Meter (MultiRAE Plus) (AreaRAE)	Initial Continuous during CSE	<19.5% and >23.5% O ₂ Evacuate area/space	Evacuate area
During all site activities	Particulates	DataRam	Periodic / Daily(perimeter of the Site)	>2.5 mg/m3 (1/2 PEL)	Apply dust suppression engineering controls
Site wide	Temperature Extremes Cold/Heat stress	N/A – Engineering controls in place	Periodic breaks w/ fluids	Variable depending on the individual and work activity	Participate in Cold / heat stress monitoring program, take breaks in the warmth / shade, drink fluids as allowed

* The reading must be sustained for at least one (1) minute in the breathing zone.

8.3 Integrated Personal Exposure Monitoring:

Integrated personal exposure monitoring is anticipated due to site contaminants. Refer to Attachment D.

9.0 SITE CONTROL AND GENERAL FIELD SAFETY RULES

9.1 Work Zones

The primary purpose for site controls is to establish the hazardous area perimeter, to reduce migration of contaminants into clean areas and to prevent access or exposure to hazardous materials by unauthorized persons.

At the end of each workday, the site should be secured or guarded, to prevent unauthorized entry. All areas of the site with access to the public will be closed by barricades.

Site work zones will include:

Clean Zone/Support Zone (SZ)

This uncontaminated support zone or clean zone will be the area outside the exclusion and decontamination zones and within the geographic perimeters of the site. This area is used for staging of materials, parking of vehicles, office and laboratory facilities, sanitation facilities, and receipt of deliveries. Personnel entering this zone may include delivery personnel, visitors, security guards, etc., who will not necessarily be permitted in the exclusion zone. All personnel arriving in the support zone will upon arrival, report to the command post and sign the site entry/exit log. There will be one controlled entry/exit point from the clean zone to the decontamination zone.

- 1) Location of Clean Zone: See attached site map

Contamination Reduction Zone (CRZ)

The contamination reduction zone will provide a location for removal of contaminated personal protective equipment and final decontamination of personnel and equipment. All personnel and equipment should exit via the decontamination area. A separate CRZ area will be established for heavy equipment.

- 1) The CRZ is a buffer zone between contaminated and clean areas and will be identified by yellow banner guard or barricade fencing.
- 2) Decontamination line is located: Where appropriate depending on location of work within facility

Exclusion Zone/Hot Zone (EZ) : Inside the orange fence boundary line

The exclusion zone will be the "hot-zone" or contaminated area of the site. Entry to and exit from this zone will be made through a designated point and all personnel will be required to sign the hot zone entry/exit log

located at the decon area. Appropriate warning signs to identify the EZ should be posted (i.e. "DANGER - AUTHORIZED PERSONNEL ONLY," "PROTECTIVE EQUIPMENT REQUIRED BEYOND THIS POINT," etc.) Exit from the EZ must be accompanied by personnel and equipment decontamination as described in Section 10.0.

- 1) Will be identified by red banner guard or signs.
- 2) General Safety Rules for EZ
 - a. wear the appropriate level of PPE defined in plan
 - b. do not remove any PPE
 - c. no smoking, eating or drinking
 - d. no horseplay
 - e. no matches or lighters
 - f. implement the communication and line of sight system

9.2 General Field Safety Rules

- Horseplay is not permitted at any time.
- All visitors must be sent to the command post.
- It is ER policy to practice administrative hazard control for all site areas by restricting entrance to exclusion zones to essential personnel and by using operational SOPs.
- Whenever possible, avoid contact with contaminated (or potentially contaminated) surfaces. Walk around (not through) puddles and discolored surfaces. Do not kneel on the ground or set equipment on the ground. Stay away from any waste drums unless necessary. Protect equipment from contamination by bagging.
- Eating, drinking, or smoking is permitted only in designated areas in the support zone.
- Hands and face must be thoroughly washed upon leaving the decontamination area.
- Cell phone use is not allowed in EZ, unless authorized by Response Manager or SHSO.
- Cell phone use while operating equipment is not allowed.
- Cell phone use while operating motor vehicles must comply with applicable DOT regulations
- Beards or other facial hair that interferes with respirator fit will preclude wearing a respirator.
- All equipment must be decontaminated or discarded upon exit from the exclusion zone.
- All personnel exiting the exclusion zone must go through the decontamination procedures described in Section 10.0.
- Safety Equipment described in Section 6.0 will be required for all field personnel.
- Personnel will only travel in vehicles where individual seats for each occupant are provided.
- Seat belts will be worn as required.
- Fire extinguishers will be available on site and in all areas with increased fire danger such as the refueling area.
- A minimum of two personnel will always be on site whenever heavy equipment is operated.
- Only necessary personnel need to be on or around heavy equipment.
- Employees will not interfere with or tamper in any way with air monitoring equipment.
- Backhoes or other equipment with booms shall not be operated within 10 feet of any electrical conductor

Minimum Clearance from Energized Overhead Electric Lines

NOMINAL SYSTEM VOLTAGE	MINIMUM REQUIRED CLEARANCE
0-50 kV	10 feet
51-100 kV	12 feet
101-200 kV	15 feet
201-300 kV	20 feet
301-500 kV	25 feet
501-750 kV	35 feet
751-1000 kV	45 feet

- Visitor log will be maintained at the command post or with the security guard. All personnel coming on site will sign in and out on a daily basis.
- Security will be maintained at the site by closing all gates during normal work hours. Site will be locked up in the evening.
- If unauthorized members of the public are found on site, contact RM immediately and do not leave the individual unattended.
- Visitors are not allowed in the work areas without authorization. Visitors must sign in at the Command Post and receive authorization to enter the site.
- Buddy System
 - The buddy system is mandatory at anytime that personnel are working in the exclusion zone, remote areas, on tanks, or when conditions present a risk to personnel.
 - A buddy system requires at least two trained/experienced people who work as a team and maintain at a minimum audible and/or visual contact while operating in the exclusion zone.
- Communication Procedures
 - Radios will be used for onsite communications and Channel 4 will be the designated channel.
 - The crews should remain in constant radio or visual contact while on site.
 - The site evacuation signal will be 3 blasts on the air or vehicle horn.

10.0 DECONTAMINATION PROCEDURES

In general, everything that enters the EZ at this site must either be decontaminated or properly discarded upon exit from the EZ. All personnel, including any state and local officials must enter and exit the EZ through the CRZ. Prior to demobilization, contaminated equipment will be decontaminated and inspected before it is moved into the SZ. Any material that is generated by decontamination procedures will be stored in a designated area in the EZ until disposal arrangements are made.

NOTE: The type of decontamination solution to be used is dependent on the type of chemical hazards. The decontamination solution for this site is water. Decontamination solution will be changed daily (at a minimum) and collected and stored on-site until disposal arrangements are finalized.

10.1 Procedures for Equipment Decontamination

Following decontamination and prior to exit from the EZ, the RM shall be responsible for ensuring that the item has been sufficiently decontaminated. This inspection shall be included in the site log.

Equipment decontamination will consist of the following steps: Clean with soap and water solution.

10.2 Procedure for Personnel Decontamination

This decontamination procedure applies to personnel at this site wearing Level B and C protection. These are the minimum acceptable requirements:

Station 1: Equipment Drop

Deposit equipment used on-site (tools, sampling devices and monitoring instruments, radios, etc.) on plastic drop cloths. These items must be decontaminated or discarded as waste prior to removal from the EZ.

Station 2: Outer Boot and Outer Glove Wash and Rinse

Scrub outer boots, outer gloves and/or splash suit with decontamination solution or detergent water. Rinse off using water.

Station 3: Outer Boot and Glove Removal

Remove outer boots and gloves. If outer boots are disposable, deposit in container with plastic liner. If not disposable, store in a clean dry place.

Station 4: Outer Garment Removal

If applicable, remove SCBA and remain on air as long as possible. Remove Chemical Resistant Outer Garments and deposit in container lined with plastic. Decontaminate or dispose of splash suits as necessary.

Station 5: Respiratory Protection Removal

Remove hard-hat, face-piece, and if applicable, deposit SCBA on a clean surface. APR cartridges will be discarded as appropriate. Wash and rinse respirator at least daily. Wipe off and store respiratory gear in a clean, dry location.

Station 6: Inner Glove Removal

Remove inner gloves. Deposit in container for disposal.

Station 7: Field Wash

Thoroughly wash hands and face with soap and water. Shower as soon as possible.

Eating, drinking, chewing gum/tobacco, smoking, or any practice that increases the probability of hand to mouth transfer and/or ingestion of materials is prohibited in any areas where the possibility of contamination exists and is permitted only in the designated break area.

Personnel will not wear or bring contaminated clothing into the break areas.

10.3 *Disposition of Decontamination Wastes*

1. All equipment and solvents used for decontamination shall be decontaminated or disposed of with the established waste streams.
2. Commercial laundries or cleaning establishments that decontaminate or are used to launder contaminated clothing shall be informed of the presence and potentially harmful effects of the contaminants.

11.0 HAZARD COMMUNICATION

Each contractor will be responsible for maintaining a copy of their Hazardous Communication Program and MSDS' on site. The following items are specific to this job site:

11.1 *Material Safety Data Sheets*

- [1] Material Safety Data Sheets will be maintained at the Command Post in the Health and Safety Binder or readily available electronically.
- [2] MSDS' will be available to all employees for review during the work shift.
- [3] See Attachment C and/or the ER Health and Safety Binder or on computer.

11.2 *Container Labeling*

- [1] All containers received on site will be inspected by the contractor using the material to ensure the following:
 - a. all containers clearly labeled
 - b. appropriate hazard warning
 - c. name and address of the manufacturer

11.3 *The following chemicals may be brought to the site:*

- [1] Gasoline
- [2] Diesel Fuel
- [3] Oil
- [4] Antifreeze
- [5] Lubricants
- [6] Calibration Gas Cylinders
- [7] Isopropyl Alcohol (equipment decon)

11.4 *Employee Training and Information*

- [1] Prior to starting work, each employee will attend a health and safety orientation and will receive information and training on the following:
 - a. an overview of the requirements contained in the Hazardous Communication Standard
 - b. hazardous chemicals present at the site
 - c. the location and availability of the written Haz Com Program
 - d. physical and health effects of the hazardous chemicals
 - e. methods of preventing or eliminating exposure
 - f. emergency procedures to follow if exposed

- g. how to read labels and review MSDS' to obtain information
- h. location of MSDS file and location of hazardous chemical list

See ER Health and Safety Binder for Hazard Communication Program and applicable MSDS'.

12.0 EMERGENCIES/INCIDENTS/INJURIES

It is essential that site personnel be prepared in the event of an emergency. Emergencies can take many forms; illnesses or injuries, chemical exposure, fires, explosions, spills, leaks, releases of harmful contaminants, or sudden changes in the weather. The following sections outline the general procedures for emergencies. Emergency information should be posted as appropriate.

12.1 Emergency Contacts

Emergency Call List and Project Organization		
Service	Name/Organization	Emergency Phone
Fire/Police/Emergency Medical		911
Police		911
Sheriff		911
*Hospital – ER	Saint Joseph 138 N Dixon Road Kokomo, IN	765-868-1089
Client Representative	USEPA OSC/ Shelley Lam	317-417-0980
SESCO Response Manager	Heidi Meyer	317-696-3734
ER SHSO	Nick Michailides	219-286-5359
SESCO Project Manager	Brad Adams	317-847-9973

*Directions from Site to Hospital and Clinic: (See Map in Attachment B)

NOTE: Maps and directions to the hospital and clinic will be posted in the office and kept in site vehicles.

Distance from site to hospital is approximately 1 miles. Driving time is approximately 2-5 minutes.

The following individuals have been trained in CPR and First Aid: Heidi Meyer (SESCO); Nick Michailides (ER)

12.2 Additional Emergency Numbers

Poison Control Center	800-222-1222
National Response Center	800-424-8802 (24 hr)
Center for Disease Control	404-488-4100 (24 hr)
AT&F (Explosives Information)	800-424-9555
Chemtrec	800-424-9300
USEPA Region 5 ER Duty Officer	312-353-2318 (24 hr)

WorkCare Incident Intervention

888-449-7787 (24 hr)

SESCO Corporate Contacts

Bill Pickard	317-554-9247
Brent Graves	317-908-4645
Darren Reese	765-517-1516

ER Corporate Contacts

ER Corporate 24 Hour Hotline	888-814-7477
ER Headquarters (St. Louis)	636-227-7477

12.3 Emergency Equipment Available On-Site

Communications Equipment	Location
Private Telephones	N/A
Mobile Telephones	RM – Heidi Meyer; SHSO – Nick Michailides
Two-Way Radios	None on site
Emergency Alarms/Horns	Vehicle Horns / Air Horn
Other:	

Medical Equipment	Location
First Aid Kits	Site Vehicles / Command Post Area
Stretcher/Backboard	N/A
Eye Wash Station: (within 100 feet of hazard zone)	CRZ/Command Post Area
Safety Shower	CRZ (if warranted)

Fire Fighting Equipment	Location
Fire Extinguishers	Site Vehicles / Command Post Area/CRZ / Spark operations
Other	Flammables storage area

Spill or Leak Equipment	Location
Absorbent Boom/Pads:	Support Zone/Trailer
Dry Absorbent:	Support Zone/Trailer

12.4 Incident Reporting/Investigations

- All incidents, including personal injury and property damage, must be reported to the RM, Supervisor, or SHSO within **20 minutes of incident**.
- The RM will contact SESCO Project manager by telephone immediately. The RM, SHSO, and effected employees will conduct an immediate investigation of the incident and document all results on the Incident and Investigation Report form (ER or equivalent).

- The RM will assign a supervisory individual to accompany all injured personnel to the clinic and follow guidelines outlined in the ER Return to Work Program (or equivalent for SESCO employees and Subcontractors other than ER).
- Copies of all Incident and Investigation Reports will be sent to the SESCO Project Manager.
- Copies of all II reports involving ER employees will be forwarded to ER VP of H&S.

13.0 EMERGENCY RESPONSE CONTINGENCY PLAN

13.1 Personnel Responsibilities

As the administrator of the project, the RM has primary responsibility for responding to and correcting emergency situations. The RM will:

- Take appropriate measures to protect personnel including: withdrawal from the exclusion zone, total evacuation and securing of the site or up-grading or down- grading the level of protective clothing and respiratory protection.
- Take appropriate measures to protect the public and the environment including isolating and securing the site, preventing run-off to surface waters and ending or controlling the emergency to the extent possible.
- Ensure that appropriate Federal, State and local agencies are informed, and emergency response plans are coordinated. In the event of fire or explosion, the local fire department should be summoned immediately. In the event of an air release of toxic materials, the local authorities should be informed in order to assess the need for evacuation. In the event of a spill, sanitary districts and drinking water systems may need to be alerted.
- Ensure that appropriate decon treatment or testing for exposed or injured personnel is obtained.
- Determine the cause of the incident and make recommendations to prevent the recurrence.
- Ensure that all required reports have been prepared and submitted.

13.2 Medical Emergencies:

Any person who becomes ill or injured in the exclusion zone must be decontaminated to the maximum extent possible. If the injury or illness is minor, full decontamination should be completed and first aid administered prior to transport. If the patient's condition is serious, at least partial decontamination should be completed (i.e., complete disrobing of the victim and redressing in clean coveralls or wrapping in a blanket.) First aid should be administered while awaiting an ambulance or paramedics. All injuries and illnesses must immediately be reported to SESCO Project Manager.

Onsite First Aid Support

Onsite medical support during project execution will be available from two or more individuals who are trained in First Aid and Cardiopulmonary Resuscitation (CPR) and bloodborne pathogens.

Onsite first aid kits shall be Type III, 16 unit kits, including one pocket mouthpiece or CPR barrier. Kits shall be checked prior to use, and at least weekly when work is in progress to ensure that contents are replaced as used.

Medical Transport of Employees and Case Management

For non-emergency injuries, a local clinic will be identified with the assistance of the Corporate Medical Consultant; WorkCare Incident Intervention (II) will be contacted immediately to establish a medical treatment plan prior to transporting the injured worker to the clinic. The WorkCare II consultant will attempt to contact the clinic ahead of the arrival of the patient to establish oversight of case management. Under no circumstances will an injured employee drive unescorted to a hospital, clinic, etc. An employee with minor injury may be transported by car after first aid treatment is given. The HSO or other project management personnel will transport the injured person to the facility. The employee who transports the injured person shall be trained in first aid and CPR whenever possible. When the injury is severe, or when in doubt concerning the severity of injury, the employee will be transported by ambulance.

Injured employees that require medical treatment or are taken to a doctor, hospital, clinic, etc., will not be allowed to resume work without a written return to work statement from the treating physician. This statement shall supply a medical diagnosis of the problem, the date of return to work, and work limitations. Should a return to work statement such as "light duty" be given, the treating physician will be contacted to determine the specific limitation. ER will make an assessment of work the employee normally performs whether or not the limitation interferes with the employee's normal work.

Whenever there are questions on the appropriateness of the diagnosis or prescribed course of treatment, WorkCare will be contacted to arrange for a second opinion. Copies of all Incident and Investigation Reports will be sent to the ER Corporate Health and Safety Manager.

13.3 Fire or Explosion:

In the event of a fire or explosion, the local fire department should be summoned immediately. Upon their arrival the RM or designated alternate will advise the fire commander of the location, nature and identification of the hazardous materials on-site.

If it is safe to do so, site personnel may:

- Use firefighting equipment available on site.
- Remove or isolate flammable or other hazardous materials which may contribute to the fire.

13.4 Spills, Leaks or Releases:

In the event of a spill or a leak, site personnel will:

- Locate the source of the spillage and stop the flow if it can be done safely.
- Begin containment and recovery of the spilled materials.

13.5 Evacuation Routes and Resources:

- Evacuation routes have been established by work area locations for this site. All buildings and outside work areas have been provided with two designated exit points. Evacuation should be

conducted immediately, without regard for equipment under conditions of extreme emergency. See site map for evacuation routes.

- Evacuation notification will be three blasts on an air horn, vehicle horn, or by verbal communication via radio.
- Keep upwind of smoke, vapors or spill location.
- Exit through the decontamination corridor if possible.
- If evacuation is not via the decontamination corridor, site personnel should remove contaminated clothing once they are in a location of safety and leave it near the exclusion zone or in a safe place.
- The RM will conduct a head count to insure all personnel have been evacuated safely.
- In the event that emergency site evacuation is necessary, all personnel are to:
 1. Escape the emergency situation;
 2. Decontaminate to the maximum extent practical; and,
 3. Meet at the command post.

14.0 CONFINED SPACE

(NOT ANTICIPATED FOR THIS SITE)

A confined space is defined as a space or work area not designed or intended for normal human occupancy, having limited means of access and poor natural ventilation, and or any structure, including buildings or rooms which have limited means of egress. Examples include tanks, vats, and basements. Confined spaces identified at this site are listed below. If a confined space entry is conducted, it will be done in accordance with procedures presented in Attachment F.

<u>Type of Confined Space</u>	<u>Location On-Site</u>	<u>Comments</u>
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